

An aerial photograph of an industrial facility, likely a NASA test facility, featuring several large white storage tanks, various industrial buildings, and parking lots. The image is slightly faded to serve as a background for the text.

Aeronautics Test Program (ATP)

Corporate Management of Aeronautical Facilities

**44th AIAA Aerospace Sciences Meeting and Exhibit
Reno, NV**

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January 12, 2006**

An aerial photograph of an industrial facility, likely a water treatment plant or refinery. The image shows several large, white, cylindrical storage tanks, a tall, grey smokestack, and various industrial buildings. The facility is surrounded by parking lots filled with cars and some greenery. The overall scene is industrial and functional.

Outline

- **Goals**
- **Background**
- **Organization**
- **Approach**
- **Primary Facilities**
- **Program Milestones**
- **Interagency Activity (NATA)**
- **Summary**

An aerial photograph of an industrial facility, likely a refinery or chemical plant. The image shows several large, white, cylindrical storage tanks in the foreground. Behind them are various industrial buildings, including a tall, thin distillation column. The facility is surrounded by parking lots filled with cars and some greenery. The overall scene is a complex of industrial infrastructure.

Goals

Corporate Management of Aeronautical Facilities

- **Increase the probability of having the right facilities in place at the right time over the long-term**
- **Operate those facilities in the most effective and efficient manner possible**
- **Ensure intelligent investment in and divestment of NASA facilities**



Background

- **Low Utilization**
 - Caused by shifting/reduced NASA aero research program content
 - Exacerbated by full-cost recovery
- **European Challenge**
 - Newer, more capable test facilities
 - Flexibility in pricing
 - Increased use by U.S. industry/military
- **Research Centers inability to sustain facilities (death spiral)**
- **RAND Recommendation: Develop long-term, funded facilities vision and plan**
- **NASA Aeronautics Research Mission Directorate (ARMD) commitment to sustain facilities**

Aeronautics Test Program Organization

Office

Director, Blair B. Gloss
Deputy, Thomas B. Irvine
Business Manager, Dina S. Weiss

Ames Research Center

Deputy Dir. For Aero.
Michael W. George

Glenn Research Center

Chief, Research Testing Div
Jeffrey E. Haas

Langley Research Center

Director, Center Ops Dir.
George B. Finelli

An aerial photograph of an industrial or research facility, likely a NASA test facility. The image shows several large, white, cylindrical storage tanks or silos, some with ladders and walkways. There are also various industrial buildings, including a large one with a tall chimney. The facility is surrounded by parking lots with many cars and some greenery. The overall scene is a complex of industrial structures.

Approach: An Overview

- **Implement the Aeronautics Test Program**
- **Begin with a subset of NASA's major research and test facilities; i.e., those facilities included in the NASA/DoD National Aeronautical Test Alliance (NATA)**
- **Categorize facilities by:**
 - **NASA requirements**
 - **DoD and industry requirements**
 - **Considered national assets**
 - **Uniqueness**
- **Provide financial support to:**
 - **Stabilize utilization fluctuations**
 - **Stabilize user pricing**
 - **Maintain future capability**

Aeronautics Test Program Primary Facilities

- **Ames Unitary Wind Tunnel**
- **Glenn Icing Research Tunnel**
- **Glenn 9x15 Subsonic Tunnel**
- **Langley National Transonic Facility**
- **Langley Transonic Dynamics Tunnel**
- **Langley Hypersonic Complex**
- **Langley 8-Ft High Temperature Tunnel**
- **Langley 14x22 Subsonic Tunnel**
- **Langley 20-Ft Vertical Spin Tunnel**
- **Glenn Propulsion Systems Lab. 3 & 4**
- **Glenn 10x10 Supersonic Tunnel**

**ATP provides
60%- 75% of
fixed costs**

Program Milestones

Activity Name	FY2006												FY2007		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Operations Support															
Assess Additional Facilities				▲	—				▲						
Charging Policy Recommendation									▲						
Develop FY07 User Awareness Strategy								▲							
Review Customer Satisfaction Surveys							▲	—				▲			
Facility Maintenance															
Define Maintenance/CoF Projects	▲ FY06			▲ FY07-11	—			▲							
Facility Upgrades & Test Technology															
Develop Technology Investment Plan				FY06 ▲			▲ FY07-11	—	▲						
University Research Activity															
Define University Research Activity						FY06 ▲	▲ FY07-11	—	▲						



Interagency Activity Expanding Current NATA*

- **Existing agreement was implemented in May 2000**
- **Broadened scope will:**
 - **Potentially address all aeronautical test facilities owned by NASA and DoD**
 - **Allow for management partnering approaches for selected facilities**
 - **Implement initiatives to promote and preserve the specialized workforce associated with experimental aeronautics**
 - **Provide an integrated communication channel between DoD/NASA and the U.S. aeronautics industry**

*** National Aeronautics Test Alliance - DoD/NASA agreement**

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Summary

- **The Aeronautics Test Program is being implemented in FY06 to insure maintenance of needed test capability for NASA and the Nation**
- **Projects**
 - Operations support
 - Facility maintenance
 - Facility upgrades and test technology
 - Facility-related research
- **Improve partnering relationships**
 - DoD and industry through expanding NATA
 - Academia